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CLAIMS

1. A method of detecting an interfering signal in a time division multiple access (TDMA) radio receiver, characterized by in the method taking samples from symbol sequences of a received signal over a TDMA timeslot,
- 5 generating by a modulation detector a signal path corresponding to the TDMA timeslot or a portion thereof,
- determining an error estimate representing the erroneousness of the signal path generated,
- 10 comparing the error estimate with a predetermined threshold value, and
- recognizing the reception of the interfering signal if the error estimate is greater than the predetermined threshold value.
2. A method as claimed in claim 1, characterized by using in the comparison an error estimate of a signal path corresponding to a half timeslot.
3. A method as claimed in claim 1 or 2, characterized by using a signal path error metric which is generated by means of quadratic errors which are calculated on the basis of the difference between individual symbol sequence specific sample points and corresponding reference constellation points constructed on the basis of the channel estimate describing the state of the radio channel used as the error estimate representing the erroneousness of the signal path.
- 20 4. A method as claimed in claim 1, 2 or 3, characterized by generating two or more alternative signal paths from the received timeslot or a portion thereof by two or more parallel modulation detectors preferably of different types,
- determining an error estimate of each signal path, and
- selecting the signal path having the best error estimate to be used
- 30 in the comparison.
5. Equipment for detecting an interfering signal in a time division multiple access (TDMA) radio receiver, characterized in that the equipment comprises
- means for taking samples (50) from symbol sequences of a received signal over a TDMA timeslot and
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a modulation detector (12) for generating a signal path corresponding to the TDMA timeslot (20, 21, 22) or a portion thereof, and that

the equipment is arranged to determine (51) an error estimate representing the erroneousness of the signal path generated and to compare (52)
5 the error estimate with a predetermined threshold value, and that

the equipment is also arranged to recognize (53) the reception of the interfering signal if the error estimate is greater than the predetermined threshold value.

6. Equipment as claimed in claim 5, **characterized** in that it
10 is arranged to use in the comparison (52) an error estimate of a signal path corresponding to a half timeslot (20 or 22).

7. Equipment as claimed in claim 5 or 6, **characterized** in that a signal path error metric which is generated by means of quadratic errors calculated on the basis of the difference between individual symbol sequence
15 specific sample points and corresponding reference constellation points constructed on the basis of the channel estimate describing the state of the radio channel used is used as the error estimate representing the erroneousness of the signal path.

8. Equipment as claimed in claim 5, 6 or 7, **characterized** in
20 that it comprises two or more parallel modulation detectors preferably of different types for generating two or more alternative signal paths from the received timeslot or a portion thereof, the equipment being arranged to determine an error estimate of each signal path and to select the signal path having the best error estimate to be used in the comparison.

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